

## **REMARKS**

In response to the Office Action dated August 1, 2008, Applicants respectfully request reconsideration.

### **Claim Objections**

Claims 4-19 stand objected to. The subject matter recited in claim 4 has been added, at least in part, to claim 1. Notwithstanding this, Applicants have changed the recitation of “substrate” to “substrates. Furthermore, Applicants have amended claim 19 to recite “a pitch axis” and changed all instances of “planer” to “planar.” Thus, Applicants respectfully assert that present claims overcome all objections raised by the Examiner.

### **35 U.S.C. § 112 rejections**

Claims 15, 17-18, and 20 stand rejected under 35 U.S.C. § 112 ¶ 2 a being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention. Claims 15, 17-18, and 20 have been amended as suggested by the Examiner. Applicants respectfully assert that claims 15, 17-18, and 20 are patentable over the 35 U.S.C. § 112 ¶ 2 rejections raised by the Examiner.

### **35 U.S.C. § 102 rejections**

Claims 1-3, and 20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,348,003 (Caro).

Caro does not teach, disclose, suggest, or make obvious a non-invasive spectrometric device, as recited in claim 1, that includes a wavelength filter configured to receive light reflected from an area of tissue, and an output processor configured calculate a level of hemoglobin as a function of an electrical signal that is generated as a function of light reflected from an area of tissue. The Examiner cited col. 4, ll. 38-47; col. 5, ll. 26-50; col. 9, ll. 51-57; col. 10, ll. 57-64; and Figs. 1, 2, and 5 of Caro as disclosing the limitations recited in claim 1.

Caro discusses a method and apparatus for determining the presence of an analyte in a medium using irradiation with a temporally-modulated electromagnetic energy at multiple wavelengths. Light emanating from a tissue sample 104 (i.e., a finger) passes through the sample 104 and is collected by an optical collection means 109. *See* Figs. 2 and 10. In contrast, claim 1 recites a wavelength filter configured to receive light reflected from an area of tissue and calculating an estimated level of hemoglobin as a function of the reflected light.

*Even if* Caro discussed processing light reflected from an area of tissue, Caro still does not discuss the wavelength filter recited in claim 1. Rather, Caro discusses that light is passed through the sample 104 and is detected by a detector assembly 141. *See* col. 8, ll. 2-5, Figs. 1, 2, and 5. Caro does not discuss that the detector assembly 141 includes a wavelength filter (i.e., neither the optical disperser 302 nor the beamsplitter 303 are wavelength filters as recited in claim 1). The Examiner, however, does cite to Caro as disclosing solid-state lasers or crystal lasers that are capable of being used as the wavelength filter. Caro discusses that solid-state lasers or crystal lasers are used as the light source. Caro does not discuss that crystals can be used as a filter to filter light reflected from an area of tissue. In contrast to Caro, claim 1 recites a wavelength filter comprising at least one pair of planar non-polarizing substrates in parallel opposed relation, at least one layer of light-wavelength modulating material disposed between the pair of planar substrates to achieve spectral coverage in the visible light spectrum.

Thus, for at least these reasons, claim 1 is patentable over Caro.

Furthermore, for at least the reasons stated above with respect to independent claim 1, dependent claims 2-3, and 20, which depend from independent claim 1, are patentable over Caro.

### **35 U.S.C. § 103 rejections**

Claims 4-8, which depend from independent claim 1, stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Caro in view of U.S. Patent No. 5,132,826 (Johnson). The Examiner does not assert that Johnson makes up for the deficiencies noted above with respect to independent claim 1 from which dependent claims 4-8

depend. Thus, dependent claims 4-8 are patentable for at least the same reasons discussed above with respect to independent claim 1.

Notwithstanding this, Applicants wish to specifically address Johnson. The Examiner cites to Johnson to make up for Caro's lack of disclosing a wavelength filter. Johnson discusses three- and four-stage Lyot filters that use polarizing layers, ferroelectric liquid crystal waveplates, and birefringent elements. The wavelength filter recited in claim 1 is not a Lyot filter. Rather, claim 1 recites that the wavelength filter comprises at least one pair of planar non-polarizing substrates in parallel opposed relation, at least one layer of light-wavelength modulating material disposed between the pair of planar substrates to achieve spectral coverage in the visible light spectrum, and a power source in power-providing communication with the substrates.

Thus, for at least these reasons, claims 4-8 are patentable over Caro in view of Johnson.

Claims 4, 9, and 10, which depend from independent claim 1, stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Caro in view of U.S. Patent Pub. 2003/0048970, now U.S. Pat. No. 6,816,636 (Cole). The Examiner does not assert that Cole makes up for the deficiencies noted above with respect to independent claim 1 from which dependent claims 4, 9, and 10 depend. Thus, dependent claims 4, 9, and 10 are patentable for at least the same reasons discussed above with respect to independent claim 1.

Claims 4, 5, and 11-15 which depend from independent claim 1, stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Caro in view of U.S. Patent No. 6,567,573 (Domash). The Examiner does not assert that Domash makes up for the deficiencies noted above with respect to independent claim 1 from which dependent claims 4, 5, and 11-15 depend. Thus, dependent claims 4, 5, and 11-15 are patentable for at least the same reasons discussed above with respect to independent claim 1.

Claims 4, 5, and 16-19 which depend from independent claim 1, stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Caro in view of U.S. Patent Pub. 2002/0131694 (So). The Examiner does not assert that So makes up for the deficiencies noted above with respect to independent claim 1 from which dependent claims 4, 5, and

16-19 depend. Thus, dependent claims 4, 5, and 16-19 are patentable for at least the same reasons discussed above with respect to independent claim 1.

Lastly, regarding claim 19, the Examiner stated that no patentable weight was given to the limitation “wherein the one layer of CLC is subjected to an in-plane electric field to produce different pitch sizes as the electric field is increased.” Applicants have amended claim 19 and assert that the entire claim should be given patentable weight.

### **Conclusion**

Based on the foregoing, this application is believed to be in allowable condition, and a notice to that effect is respectfully requested. If a telephone conversation with Applicant’s representative would help expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at (617) 542-6000.

The Director is hereby authorized to charge any fees that may be required, or credit any overpayment, to Deposit Account 50-0311, Reference No. 35947-002. The Director is further authorized to charge any required fee(s) under 37 C.F.R. §§ 1.19, 1.20, and 1.21 to the abovementioned Deposit Account.

Respectfully submitted,

/Kyle Turley/

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